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WHAT TO DO.

“Revert not to the old, keep in the new.”

As you advance psychic powers will come upon you in a greater or less degree—do not use these to try to see for self excepting for your soul's advancement; to try to see material things brings bad elementals about you. These will throw you into confusion.

Keep peace with yourself and with your surroundings. Listen for each note of discord in your life and correct it, that you may not mar the perfect harmony that should make up your home or environment and that others may see and feel the beauty of the teachings that you follow. So do you help humanity and make your Heaven upon Earth and have less need of the Devachanic rest.

Never *seek* enjoyment, but take it as it comes, it is healthy for you and others.

Make somewhat of a play-day of life, not such a serious business. Remember that it is a stage and you the actors. Study your part well, comprehend it if possible, act it, but do not identify yourself with it—a part is better acted where the actor is not identical with it. An Irishman cannot act the part of an Irishman, or a negro do justice to the peculiarities of his race.

ANCIENT AND MODERN PHYSICS.

III.

From the knowledge that comes by revelation through the intuition added to the knowledge that comes by sensation through the intellect, Modern Science has built up an entirely new conception of the universe. It fills the entire universe with matter much thinner and rarer than the thinnest of our gases, which it calls ether. All the suns and planets and cosmic dust are made, it says, out of the etheric matter, by chemical combinations, each prakritic atom being made from ether exactly as a drop of water is made from eight gallons of hydrogen and one gallon of oxygen gas.

This etheric matter follows identical laws with prakritic matter, or accurately, the laws of our matter flow from the etheric matter from which it is made. The ether has two hundred or more elementary substances, each atom of our eighty or ninety "elements" being the chemical union of great masses of two or more of the etheric elements or their combinations. These etheric elementary substances combine and unite, our elementary substances simply following in their combinations the law which they inherit from their parents. They take form and shape. They vibrate through one octave, and take solid liquid or gaseous form in ether, as their types here in our world take it in prakriti, as their vibrations are increased or diminished. In short, the ether is the proto-type of our physical or prakritic world, out of which it is made and a product of which it is.

As this ether is "physical" matter, the same as prakriti, one harmonic law covering both, and as this ether fills all space, Modern Science divides physical matter into two kinds, which for convenience in differentiation are here called prakritic and etheric.

Matter is something—Science does not know or care to know what—in vibration. A very low octave of vibration produces prakriti, a very high octave of vibration produces ether. The vibration of prakriti ends in thousands; that of ether begins in billions. Between them there is a gulf of vibrations that has not yet been bridged. For that reason Science divides matter into two "planes," or octaves, of vibration—the matter of this visible and tangible plane

being called prakriti and that of the invisible and intangible plane being called etheric. Across this gulf the two planes respond to each other, note for note, the note in trillions chording when the note in thousands is struck. Note for note, chord for chord, they answer one another, and the minutest and the most complex phenomena are alike the result of this harmonic vibration, that of the ether supplying Force, and that of the prakriti a Medium in which it can manifest.

This knowledge of ether is not guess work, or fancy, and while it is as impossible of proof as the axioms of geometry, it is worthy the same credence and honor. We are working on physical axioms exactly as we work on geometrical axioms.

Modern Science represents each and every prakritic atom as a globe like the earth, floating in space and surrounded by an atmosphere of ether. "The subdivision of prakritic matter until we reach etheric atoms chemically united to make the physical unit" is the correct definition of an atom. The prakritic physical atom has length, breadth, and thickness. And it has an atmosphere of ether which not only interpenetrates the atom as oxygen and hydrogen interpenetrate the drop of water, but furnishes it with an envelope as the oxygen and hydrogen furnish the drop of water with one.

Each physical (prakritic) atom is as far apart from every other atom as the stars in heaven from each other—in proportion to size. No two physical prakritic atoms touch or can touch.

It was this discovery by Faraday that laid the solid foundation for all modern science, for all our ideas of physical phenomena. c

Each physical atom is the center of an etheric molecule composed of many etheric atoms vibrating at a greater or lesser speed and interpenetrating the atom. Each may be considered a miniature earth with its aerial envelope, the air, penetrating all parts of it.

The etheric plane of matter not only unites with this prakritic plane through the atom, but it interpenetrates all combinations of it; beside the atom as well as through the atom. The grain of sand composed of many prakritic atoms is also composed of many times that number of etheric atoms. The grain of sand is etheric matter as well as prakritic matter. It exists on the etheric plane exactly the same as it exists on the prakritic and it has etheric form as well as prakritic form.

As each atom of this physical world of ours—whether of land, or water, or air, whether of solid, liquid or gas—is the center of an etheric molecule, we have two worlds, not one: a physical world and an etheric one; a visible world and an invisible world; a tangible world and an intangible world; a world of effect and a world of cause.

And each animal, including man, is made in the same way. He has prakritic body and an etheric body; a visible body and an invisible body; an earthly body and one “not made with hands,” in common touch with the whole universe.

Let us suppose that a certain wise teacher of physics places a row of Bunsen burners under a long steel bar having a Daniell’s pyrometer at one end, and addresses his class (substantially) as follows:

“At our last lecture we found that the matter of the universe permeated all space, but in two conditions, which we agreed to call physical and etheric, or tangible and intangible. It is all the same matter, subject to the same laws, but differing in the rate of vibration, the physical matter vibrating through one great octave or plane, and the etheric vibrating through another great octave or plane one degree higher—the chording vibration of the matter of the two planes in one note producing what we call energy or force, and with it phenomena.

“This is a bar of steel 36 inches long. It is composed of physical atoms, but no two physical atoms touch. Each physical atom is as far apart from every other atom as the stars in heaven from one another—in proportion to their size. The atoms and the spaces between them are so small to our sight, that they seem to touch. If we had a microscope of sufficient power to reveal the atom, you would see that no two atoms touch, and that the spaces between them are as Faraday says, very great in proportion to their size. I showed you last term that what appeared to be a solid stream of water, when magnified and thrown upon a screen, was merely a succession of independent drops that did not touch. I can not yet give you proof of the bar of iron being composed of independent atoms, but that is the fault of our instruments, and you

must take my word for it until the proof is simplified and made easy of application.

"Each one of these physical atoms is a miniature world. It is the center of an ocean of ether, composed of many atoms; and while no two physical atoms touch, their etheric atmospheres do touch, and any change in the vibration of the etheric atmosphere of one will be imparted to that of the next. As the vibration of the physical atom must be in harmony with that of its etheric atmosphere, any change coming to one will be imparted to the next, and the next, through the ether surrounding them.

"You can see that the index at the end of the bar has moved, showing that it is now longer. That means the etheric atoms are now vibrating faster, taking more space, and have necessarily forced each physical atom farther apart. The bar is not only longer, but softer, and as the vibrations increase in rapidity the time will come when it will bend by its own weight, and even when it will become a liquid and a gas.

"If you put your hand anywhere near the bar you will feel a sensation called heat, and say it has become hot. The reason for that is that you are in actual and literal touch with the bar of iron through the ether. It is not alone each atom of the bar of iron that is surrounded by the ether, but each atom of the air, and each atom of your body. Their etheric atmospheres are all touching, and the increase in the vibration of the ether surrounding the atoms of iron is imparted to those of the air surrounding it, and these in turn raise the rate of vibration in the etheric atoms surrounding the physical atoms of your hand. This rate of vibration in your nerves causes a sensation, or mental impression, you call "heat." Consciousness of it comes through your sense of touch; but after all it is merely a "rate of vibration" which your brain recognizes and names.

"The bar has now reached a temperature of about 700 degrees, and has become a dull red. Why do you say the color has changed, and why do you say red?

"Because the rate of vibration of the etheric atoms in the bar is now about 412 trillions per second, and this rate of vibration having been imparted to the ether of the air, has in turn been imparted to the ether of your eye, and this rate of vibration in the ether of the nerves of your eye your brain recognizes and calls "red."

"The heat still continues and increases. You now have both heat and light. So you see that the ether is not vibrating in a single note, but in two chording notes, producing light and heat. There are two kinds of ether around the iron atom. There is sound also, but the note is too high for one's ears. It is a chord of three notes.

"Professor Silliman, of Yale, discovered over twenty years ago, that the ether could be differentiated into the luminiferous, or light ether, and the sonoriferous or sound ether.

"Other great scientists since then have found a third ether—the heat ether.

"Their discoveries show that the atmospheric etheric envelope of each etheric atom is made up of etheric atoms of different vibratory powers. As the atmosphere of the earth is made up of atoms of oxygen and nitrogen and argon, so that of an atom is made up of three kinds of ethers, corresponding to three of our senses. That it consists of five ethers, corresponding to our five senses, as the ancient Hindus assert—who can say?

"I mention this subject of the differentiation of the ether merely that you may not suppose that the ether is a simple substance. For the present we will treat it as a simple substance, but next year we will take it up as a compound one.

"This steel bar before you is not one bar, but two bars. There is a visible bar and an invisible bar, the visible bar being made of physical atoms, and the invisible bar of etheric atoms. The etheric bar is invisible, but it is made of matter, the same as the visible bar, and it is just as real, just as truly a bar as the one we see.

"More than this. The etheric, invisible bar is the source and cause of all phenomena connected with the bar. It is the real bar, and the one we see is merely the shadow in physical matter of the real bar. In shape, strength, color, in short, in everything, it depends on the invisible one. The invisible dominates, governs, disposes. The visible is merely its attendant shadow, changing as the invisible, etheric bar changes, and recording for our senses these invisible changes.

"The invisible change always comes first; the invisible phenomena invariably precede the visible.

"In all this physical world—in all this universe—there is nothing, not even a grain of sand or an atom of hydrogen, that is not as this bar of iron is—the shadow cast on a visible world by the unknown and mysterious work of an invisible world.

"Land or water, mountain or lake, man or beast, bird or reptile, cold or heat, light or darkness, all are the reflection in physical matter of the true and real thing in the invisible and intangible world about us. "If we have a visible body we have an invisible one also" said Saint Paul. Modern science has proven he was right, and that it is the invisible body which is the real body.

"If this earth and all that it is composed of—land or ocean or air; man or beast; pyramid or pavement—could be resolved into the physical atoms composing every thing in it or on it created by God or man, each atom of this dust would be identical physically. There would not be one kind of atom for iron and another for oxygen.

"The differentiation between what are called elementary substances is first made apparent in the molecule or first combination of the atoms. It is not in the atom itself, unless it be in the size, as may not be improbable. The atoms combine in different numbers to make differently shaped molecules, and it is from this difference in the shape of the molecule that we get the difference between gold and silver, copper and tin, or oxygen and hydrogen.

"In all chemical compounds, such as water and alcohol, the molecules at the base of the two or more substances break up into their original atoms and form a new molecule composed of all the atoms in the two or more things combined. To make this chemical combination we must change the rate of vibration of one or the other or both until they strike a common chord. As we saw last term, oxygen and hydrogen have different specific heats, and no two other elements have the same specific heat, while heat raises the rate of vibration. Any given amount of heat raises the vibration of one more than another. Apply heat, and the rate of one will rise faster than that of the other until they reach a common chord. Then they fall apart and recombine.

"If we pass a current of electricity through this sealed jar containing oxygen and hydrogen in mechanical union, the spark that

leaps across the points furnishes the heat, and a drop of water appears and falls to the bottom. A large portion of the gases has disappeared. It has been converted into water. What is left of the gases will expand and fill the bottle.

“The drop of water but for local causes, but for a certain attraction of the earth, would float in the center of the jar at the center of gravity, as the earth does in space. But the center of gravity of the two bodies is far within the earth, and the drop gets as close to it as it can. The earth’s “pull” takes it to the bottom. If the jar were far enough away in space the drop would float, as the earth floats, at a point where all pulls balance, and the drop of water would have enough pull of its own, enough gravity within itself to hold all the gas left in the jar to itself as an atmosphere. It would be a center of energy, a miniature world.

“The drop of water is not a homogenous mass. About one third of the bulk of the drop of water is made up of independent oxygen and hydrogen atoms interspersed through it, as any liquid is through this piece of blotting paper. And it has, and keeps, by its own attraction, an atmosphere of the gas. Each molecule of water has a thin layer, or skin, of the gas; even as it comes from this faucet.

“Let us return again to the physical dust, the atom. Why should it form by fives for iron, by nines for hydrogen? Where did the atom come from? What is it? We know that like the drop of water, it is a miniature world with an atmosphere of ether; and the natural inference is that it is made from ether as the drop of water was made from gas. Many things confirm this inference, and it may be accepted as ‘a working hypothesis’ that it is made from ether as the drop of water is made from gas, by the chemical union of a large amount of ether of different kinds, the etheric molecules of which consist of 2 and 3 or 5 and 4 etheric atoms, and that the tendency to combine in this or that number in physical matter is an inherited tendency brought with it from the etheric world of matter on which, or in which, each element of this world is two or more. There is no kind of matter in this physical world, that has not its prototype in the etheric, and the laws of its action and reaction here are laws which it inherits and brings with it.

They are not laws made here. They are laws of the other world—even as the matter itself is matter of the other world.

"In 1882, Professor Lodge, in a lecture before the Royal Institution on 'The Luminiferous Ether' defined it as:

'One continuous substance, filling all space, which can
'vibrate as light, which can be sheared into positive and
'negative electricity, which in whirls constitutes matter, and
'which transmits by continuity and not impact every action
'and reaction of which matter is capable.'

"This reads to-day like baby-talk, but at the time (eighteen years ago), it was considered by many timid conservative scientists as 'a daring statement.' It is noteworthy in that it was the first public scientific announcement that the physical matter is a manifestation or form of the ether. And it was made before general acceptance of the division of the ether into soniferous, luminiferous, and tangiferous. !

"'Which in whirls constitutes matter.' Professor Lodge believed that 'some etheric molecules revolved so rapidly on their axis that they could not be penetrated.' Watch the soap-bubbles that I am blowing. Each and every one is revolving as the earth revolves, from west to east. What I wish to call your attention to is the fact that can be proven, both mathematically and theoretically, that at a certain rate of speed in the revolution they could not be penetrated by any rifle-ball. At a higher rate of speed they would be harder than globes of solid chilled steel, harder even than carbon. Professor Lodge believed that the etheric molecule revolved so rapidly that, thin as it was in its shell, it gave us the dust out of which worlds were made. There is one fatal error in this idea, although it is held even now by many. It is based entirely on gravity, and gravity is alone considered in its problems. There are two great forces in the universe, not one, as many scientific people fail to remember—Gravity and Apery, or the centrifugal and centripetal forces. THE PULL IN IS AND MUST BE ALWAYS BALANCED BY THE PULL OUT. There is in the universe as much repulsion as attraction, and the former is a force quite as important as the latter. The bubble's speed kept increasing until apery, the tendency to fly off, overcame gravity, and it ruptured.

"Professor Lodge failed to take into account this apergic force, this tendency to fly off, when he gave such high revolutionary speed to the etheric molecules, a speed in which apergy would necessarily exceed gravity. The failure to take apergy into consideration has been the undoing of many physicists.

"To-day we know that the ether is matter, the same as our own, only finer and rarer and in much more rapid vibration. We know that this ether has its solids, liquids and gases formed from molecules of its atoms, even as our own are formed. We know that its atoms combine as ours do, and while we have but eighty elementary combinations, it must have more than double the number. We know that every form and shape and combination of these elements from this plane flows from inherited tendencies having their root in the etheric world.

"The two worlds are one world—as much at one with ours as the world of gas about us is at one with our liquids and solids. It is 'continuity, not impact.' They not only touch everywhere and in everything, but they are one and the same in action and reaction."

Thus spake a certain wise teacher of physics.

To his wise utterances, we can only add that such as we are to-day "we see through a glass, darkly." Yet there will come a day when the physical bandages will be removed from our eyes, and we shall see face to face the beauty and grandeur and glory of this invisible world, and that in truth it 'transmits by CONTINUITY and not impact every action and reaction of which matter is capable,' forming one continuous chain of cause and effect, without a link missing. There are no gulfs to cross; no bridges to be made. It is here; not there. It is at one with us. And we are at one with it.

One and the same law controls and guides the etheric atom and the physical atom made from its molecules, whether the latter are made in "whirls," as at first supposed, or by orderly combination as now believed.

In fact, this visible world of ours is the perfect product of the other invisible one, having in it its root and foundation, the very sap of its life.

THOUGHTS ABOUT ART.

I.

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The art of the painter and the sculptor is the representation, or the presentation, of nature. The greatest art is the truest representation.

What is the value of this representation?

We may gain some insight into its value by seeking a touchstone of all values in universal nature.

Consider the processes of nature. Their obvious aim is the growth of each individual life, and this nature, informed by the Infinite Will, attains by forcing the individual life out of itself into contact with the worlds about it. In the animal the instruments employed to this end are the instincts of self-preservation and reproduction; or better, these instincts *are* the Infinite Will—the forms in which It appears. By these, respectively, the individual and the species are established in nature; and by these the individual is moved forwards to gain experience. Every step forwards has its origin in a spiritual impulse from the Infinite Will culminating in an outward expression; and every step forwards involves a new creation, which expresses the incarnation of the spiritual element in matter. Guided by the spiritual impulse as instinct the animal seeks food and a mate. The most obvious immediate results are the creation of new tissue and offspring. But these are but means to bring about and perpetuate opportunities for the development of the individual by external association.

In the human stage the whole psychical, which includes, of course, the mental world, is added to the theatre of action. The instruments of the Infinite Will are still the animal instincts, but also and specially, the intuition, through which each man gains his sense of the souls of his fellow men. In man, indeed, this intuition is obscured and perverted by the false sense of separateness which leads each individual to incase himself in a rigid and exclusive shell; but none the less the sense of other human souls which it brings him, though distorted, is a chief guide to all human action. The power of the instincts is immensely augmented in man by the psychical mirroring of physical acts. Memory and anticipation

are his handmaids, and the impressions thus infinitely multiplied, magnified and perpetuated, are the source of his powerful passions and appetites. But still more far-reaching, dominating human life, are our intuitions of other men, refracted by the false idea of separateness. Thence come ambition, vanity, thirst for power, greed for wealth.

All these are the effective means by which the Infinite Will working in each man forces him outward, into contact with his fellows. The process is a double one: growth and expansion through the struggles and exertions imposed by external association; and the drawing down from above and development within the man of the infinite powers of the soul. Thus power is gained, and thus is also won a further insight into the real nature of other men. Then comes a perception of the unreality of the self-built exclusive barriers. As the barriers dissolve the man comes gradually to feel the oneness of all men with himself. The intuition which, when refracted by his false idea of separateness, prompted him to selfish action, now impels him to act humanely; and when at length he sees and realizes the ultimate absolute identity of all creatures and of all nature with himself, the goal of the long process is near at hand. A perfectly developed individuality, perceiving and realizing universal identity, is the end; association, intimate, varied and prolonged, is the means.

This underlying spiritual unity, which all nature strives to declare, furnishes at once the source of man's delight in natural beauty and the end to be attained by its contemplation. He feels an inherent attraction in all that is true; and visible beauty is one aspect of truth. Its influence broadens and softens his nature, and tends ever to bring him nearer to the point where he can perceive his identity with the All.

So Ruskin, with his marvelous insight, struck an eternally true chord when he became the apostle of the Religion of Beauty. He searched profoundly for the cause of the response which beauty calls forth from the human heart. The elements which he found to be evocative of that response were Infinity, Unity, Purity, Repose, Symmetry, Moderation, and other attributes which he assigned to Divinity; and it was in the aspiration of man towards the Divine

that the response, he believed, consisted. For that which he saw and taught Ruskin will ever merit the gratitude and the reverence of the world; but he stopped short of the final and profoundly simple cause—perforce, because he did not know the spiritual identity of all creatures, even up to the Infinite Himself.

The true artist, like every other true workman, however humble, is a co-worker with the Infinite Will, as it strives ever onward towards Union; and this he is by virtue of his power of bringing the beholder into vivid, intimate and inspiring touch with various aspects of external nature and the human soul. The value of his work will depend upon the amount of natural truth which he is able to impart to his representations. The word "truth" I use in its broad and ultimate sense, as indicating the normal and universal as opposed to the perverted and particular. Thus it will be impossible for the man of true artistic instinct to portray depravity, vice, pain, or ugliness; because by so doing he will bring the beholder into association, not with that which will broaden and elevate, but with that which will narrow and degrade.

The value of his results will also vary with the class of natural objects which his abilities enable him to interpret. In this regard the inanimate world is at one extreme of the scale, and the soul, expressed in the human face, is at the other. To portray the soul in the human face is the acme of all pictorial and plastic art. By such interpretation the artist brings the beholder into association with those qualities of the soul which he represents, and thus, revealing man to man, he works in the highest field of human activity.

An illustration is worth many abstract statements. Look at the face of St. Dominic kneeling before the cross in Angelico's great Crucifixion in the convent of San Marco in Florence. Deepest yearning, unutterable love, unfathomable sorrow, are graven there. Did we know before that there were those depths in the human heart? In that face the holy monk has laid bare to all who look the abundant wealth of his own soul. True it must be. No artist, however masterful, could counterfeit that face. No man could paint it who had not already lived it.

In the same convent, across the court, is the "foresteria,"

apartments devoted to hospitality. Above the entrance is the figure of Christ in pilgrim garb, seeking shelter, and welcomed by two Dominican brothers. In purity that face of Christ is as the gleaming snow of an Alpine summit; its tenderness, that of the Lords of Compassion. Think you Beato Angelico did a light thing for the world when he wrought it? For four centuries it has shed its sweet influence from the portal of that hall.

In representing nature the artist can also interpret:—he is able to select and emphasize those features and attributes which he conceives to be characteristic or important, and drop behind or omit those not suited to his present purpose; to assemble also—to bring figures and objects into effective groups and relations. He thus concentrates and strengthens his effect without sacrificing truth of representation. He may throw his whole force upon a single feature, as some one trait of character, some one emotion, and thus create upon the beholder an impression far more vivid and intimate than would be possible were his attention distracted by the other characteristics of the subject in nature. His special impressions may thus be more effective than those to be derived from a contemplation of nature itself.

For a very striking example of the power thus at the command of the artist I shall again refer to the paintings of Fra Angelico. The qualities which he specially portrayed were purity and devotion. Never have those aspects of the human soul been pictured on canvas with such marvelous force. His seraphic faces glow and gleam with the purest and intensest light. One cannot contemplate his paintings without making obeisance to the lofty soul which breathed into them this celestial fire. One has perhaps never seen such faces; but one feels assured that the soul possesses these qualities, and that they are the heritage, in due proportion, of the perfected man.

Angelico has indeed thrown an immense emphasis upon one aspect of the soul; but that which he has emphasized is true; and if we have studied his faces and realized their truth, we are nearer to a true comprehension of human nature than before; and we have gathered in ourselves from him a motive force urging us towards the attainment of the ideals which he has depicted.

WHAT IS EDUCATION?

To begin with, it seems to me that the end proposed for education is success in life and that it is a true one.

Now in taking up this question of a successful life, I wish I could handle it in a vigorous and incisive way. I wish I could put forward a brilliant and satisfying definition of life, and success, and, while in the vein, add definitions of beauty and truth, and many more things, and so bring rest to the mind of man, and spread quiet and peace over many hard-fought fields.

But, unfortunately, I have no definitions; nor do I see great hope of getting them. So I must take a lower way, and try, by mere empiricism, to reach the same end, if so it may be.

Take this question of success in life, and how to gain it. Let us look at the matter as it stands. Here we are, in the midst of this natural world, and here, it seems, we are to stay, for a time at any rate. And I hasten to confess that I have no definition of the natural world, and, indeed, have long given up hope of finding one. But I mean the world of day; of sun and sky; of the green earth, and the trees that grow on it, and the creatures that move about on the face of it, and, among them, ourselves,—we who would settle this question of education; and many others who have not even heard whether there be any education. That is not a definition; but it will serve.

Now we find ourselves in the midst of this natural world not quite taken care of, and yet not quite neglected. We need all kinds of things, and they are there, for the most part; but we must be up and doing if we would get them. And this gadfly of necessity, so to speak, follows us for a certain number of hours every day, and even murmurs round us through the watches of the night.

So the first matter we must attend to is this: there are a number of things we need; and, for the most part, these things may be had: only we must bestir ourselves to get them. The natural world has a number of calls on us, or invitations and offers to us, if you will; and, by muscular exertion, we must obey these calls and accept these invitations. So that the first part of success in life, it seems to me, is this: through muscular effort to keep on good terms with the natural world, so that we shall move into

shelter, when we are cold; plunge into cool waves when we are hot; find such food as we may need to satisfy our hunger; and, when we have done that, find things pleasant to the taste, up to the limits of repletion; further, if we find the weather too cold, to get such coverings as may be, and to adorn these as pleasing fancy may suggest; taking pretty-coloured fragments of the natural world—stones and feathers, and flowers, and the like—to serve our ends. There are other ends than these of warmth and coolness, of food and raiment, but these are the chief; and so long as we fulfil these, so long as we are on good terms with Nature in these regards, I think we may say that our life has been so far successful.

Only one further thing remains to be said to qualify this our first result, and that is this: instead of effecting these ends by our own muscular exertion, we may persuade other people to bestir themselves, instead of us; we gain something thereby; but we lose something also; for who would go swimming by deputy, supposing air and water pleasantly warm?

But, for argument's sake, let us suppose that everyone of us must so bestir himself as to keep on good terms with the world—the natural world of sky and earth, and all that is between them. To do this, to keep on good terms with Nature, is success in life; to fail,—is failure.

If this be so, then education is everything that helps us, that supplements our muscular efforts, or makes them more effective, or teaches us to get more out of Nature, or better quality: in general, all that helps the natural man to keep on good terms with Nature. So far, I think, we will all go; and, going so far, it would seem easy enough to say what things are good in education, and what are not. For everything which helps us to keep on good terms with Nature is good; and other things are not.

It would seem, at the first blush, that I have come to the conclusion of some of the writers I have been reading: that the only thing which it is practical to learn is natural science,—the teaching, that is, concerning the natural world; and that children should be set to study this, and to leave all other things unstudied. But, if you think a moment, you will find that the conclusion is indeed thus,—and yet not quite. A wise education would rather be to

teach us how to exert ourselves to keep on good terms with the natural world, and to direct us how to make these terms better; how to make our muscular exertions of most avail; how to get as much out of the natural world as we can; or, briefly, to put us into a true relation with the natural world, through muscular exertion, through our natural powers.

And, lest I may seem to have given up the citadel too hurriedly to the teachers of science, I must remind myself of one or two things which are sometimes left out of sight. And I must own to a misgiving whether the teaching of science, as it is called, and as it is understood, really does very much to put us on good terms with the natural world, and to keep us there. I have so often taken up this or another science, with good hopes, and seen the glamor fade so many times, that I must record my disappointments as a warning to others. To keep on good terms with the natural world, we must be healthy animals first, and adroit animals only afterwards; and it seems to me that the "scientific education" aims at making us adroit animals first, and healthy animals only afterwards. Does the man of science, as he takes his well-earned walks abroad, impress you as being on as good terms with the natural world as the small boys swimming in the pond,—even if they do get drowned now and then, and so find a new relation to things around them. In general, may we not suspect that there is a natural way, and a sophisticated way, of keeping on good terms with the world; and that the first is known to the small boys in the pond; only the latter to the "professor" who observes them? Is natural science really of so much use, either to make us healthy animals or adroit? I have come to doubt it. So that, if I am accused of surrendering the citadel to the armies of scientific educators, I am constrained to say I have done no such thing. I would far sooner leave the pond to educate the small boys than give them to the professors.

And, as I have ventured so far, I feel in the mood to go a little further,—just like these small boys swimming; if I get into deep water, I shall rely on them to pull me out again. Briefly, I would take my courage in both hands, and question the whole claims of the scientific educator, and his assumption of making us more snug and homelike in this best of possible worlds. And I would not,

without a struggle, consent to our babies being given up to the men of physiology on the mere claim of these to put them in touch with the actualities of life; to save them from Nature's snares and pitfalls, to guide their tender feet among bad drains, and food unwholesome, and clothing not fit to wear, and much more of like practical force.

This idea, that science is so "practical," is just one of the things which give me an uneasy feeling; and I feel that I must question it further. Our modern life is hedged in with comforts and amenities, it is true; and, though we have grown somewhat tender and hectic in consequence, yet much of this is altogether well.

But, I think, the men of laboratories have got credit for far too much of this. How many of the arts of life really come out of the test-tube and crucible? How many out of the shrewd heads of upholsterers and followers of humble arts and crafts; keen-eyed workmen, and clever boys? I take that tale as typical, of the boy who wanted to play pitch-and-toss, and so invented the self-acting valve of the steam-engine. He makes the invention; but the professor writes the annals. And so we find much praise of professors therein. "When I write my diary," said Wellington, "many statues will come down." And I have long suspected that if the workmen, the upholsterers, the small boys, did their part in writing the annals, the "scientific education" would lose something of its glossy pride. Have these assured persons really told us anything about life, about ourselves, about the natural world? Have they shown us how to face our sorrows?

But we were speaking of natural life, and of our being on good terms with the natural world.

Let us come back, then, to this mere question of amenity—of sanitation, if you will. Even here, much is believed and taken for granted that seems to me most questionable. Once we have sanitary engineers enough to keep the waterworks of our houses in order, once we have doctors enough,—and I will not raise the question of how many that may be,—where is the need of teaching the babes more of these things? Shall we all turn plumbers and gasfitters, domestic carpenters, amateur electricians? Shall we multiply the armies of those who know how to cure a cold?

Not so long ago we were all aflame with the passion to save our souls. We learned all things that made for that end. We burned our candles by midnight, and wrestled in the solitude to put the hosts of darkness to flight. And what was the end of it all? What the sincere fruit of so much sincerity? Was it not the knowledge that the best thing we can do for our souls is often to leave them alone, to let them save themselves? To throw our doors open to the everlasting youth of the sunshine, and, not too carefully instructing our hearts how they shall love and hate, to trust more and more to that primeval spirit within us, which comes gleaming up in our hearts, with its old omniscience, its passion, its sorrows, and its joys.

Nor will it be far otherwise with this passion of ours for saving our bodies through "scientific education,"—this new fanaticism, which now besets us with the same heavy-browed burning of midnight lamps. We shall come to let our bodies save themselves as our souls have to. We shall trust more to Nature's old wisdom, gathered now through so many grey eons and stored up in us, even in every atom of our bodies; and having a far more certain hold on the natural world than the best of our professors.

Take a trite simile of the way we try to capture Nature: one of those "modern" bathing-places where piers, and buoys, and ropes, and costumes trifle with the wildness of the waves. And take, again, such natural joy as one may find on a deserted coast, with no company but the seals and sea-gulls; no costume but the white sea-mist and the slanting sunbeams across the gilded floor of the sea; no pier but the brown rocks, with their seaweed tresses. Is there not something here that will not be captured and tamed?—such a trickling of bubbles along one's ribs as even paleolithic man might envy.

And I think all Nature may be taken in this direct way, without any siege-train of sanitary appliances; and in that path to be explored in days to come we shall first truly learn how much it means to be on good terms with the natural world; to have a true relation to Nature. That will be the victory of the future; not some cheap trick of flying machine, or mineral food for chickens. Then shall we wear the world as a garment, the fair earth and the majestic dome of heaven.

A SUGGESTION.

When Christ said that "whosoever shall not receive the kingdom of God as a little child shall in no wise enter therein," he probably spoke over the heads of his hearers, for very few even to-day apprehend his meaning. "The Kingdom of God is within you," he told them on another occasion.

"The Kingdom of God cometh not from observation." It comes only to those who search for truth and light.

What he meant was that in the search for truth we must have the inquisitive mind of the child, not the sceptical mind of the man; that we must seek truth, not error. The search for error has become with us natural and instinctive.

We cannot realize how strong it is, until we listen to some man expounding or explaining some truth contrary to the general belief of his auditors, and note that not one of them will remark, "What he said about so-and-so was true." Each and every comment will relate to some error that he made. The more trivial his error the more it will be talked of. His truth will not be mentioned. Yet, if we knew every error into which mankind had fallen, if we could point out every error or misstatement in every book that was ever written, we would not have advanced one step in knowledge or added one grain to our stock of truth.

The child does not believe every thing he is told; he is not credulous. He is like the miner who looks for the specks of gold in his pan; who does not fix his eyes upon the sticks and stones and debris. He is looking for truth as the miner is looking for gold, and that which is not truth, or probably truth, does not interest him. He tosses it aside after he has picked out what is true.

If there is one small truth in a book among ten thousand errors we should find that truth, and make it our own. We should not waste our time hunting for errors to combat. We may win all the victories of this kind that can come in a life and be no wiser. This does not preclude us from fighting for truth when it is assailed, but that is a very different thing from our attacking error, whenever and wherever we find it. Even the defence of truth is rarely profitable. It can take care of itself.

Seek truth. Look only for the colors in your pan. In mining for gold, under twelve colors (specks of gold) will not pay; but in mining for truth one color will pay.

If we seek, we find. If we seek error we find it. If we seek truth, we find it. If we seek error we do not notice the truth; if we seek truth we do not notice the error.

We find what we are seeking.